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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/850,922 05/02/97 RYLES

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EXAMINER

DRODGE, J

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 01/04/00

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 08/850,962

Applicant(s)

RYLES

Examiner

Joseph Drodge

Group Art Unit

1723



☒ Responsive to communication(s) filed on Nov 26, 1998

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-16 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-3, 6, 7, 11, and 12 is/are rejected.

☒ Claim(s) 4, 5, 8-10, and 13-16 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☒ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

1. *Claim Rejections - 35 U.S.C. § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Drori patent 4,614,581.

Drori discloses a filtering device comprising stacks of filter disc elements in which the stacks is coupled to a valve system , comprising a plurality of valves which include biased spring devices that are responsive to increased pressures upstream of the filtering elements to operate to initiate backwashing operations.

Claim Rejections - 35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 6, 7, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Granot patent 4,552,655 or Drori patent 4,614,581 in view of Rosenberg patent 5,047,548 and one of Kawai et al patent 4,774,000 or Raifman patent 5,112,503.

These claims differ from ('655) and ('581) in requiring that the filtering structure comprise a membrane filter. However, Rosenberg, in column 5, lines 9-22 teaches to include disc filtering

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structures configured to filter out both coarse and ultrafine particulates in an irrigation system. Also, each of Kawai et al and Raifman teach that filter disc stacks in which the discs comprise membrane filter units are useful to separate out fine particulates in a wide range of water filtering applications including industrial uses. At the time the present invention was made, it would have been obvious to one of ordinary skill in this art to have modified the Granot or Drori apparatus so as to include membrane filtering discs, as suggested by Rosenberg in combination with either Kawai et al or Raifman, so as to filter out particulates of all sizes from the flow of irrigation water so as to the useful life of downstream irrigation nozzles and other components in the irrigation system susceptible to malfunction when clogged.

Allowable Subject Matter

7. Claims 4^{5,8-10} and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 4^{5,8-10 and 13-16} are deemed to distinguish in view of recitation in claim 4 of the valve means including a moveable valve member and the filter element being coupled to the valve member and adapted to move the valve member to reverse the flow of liquid. Such limitation defines a non-obvious self cleaning action allowing a faster and more complete cleaning of filter elements than provided in any of the prior art.

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Claims 13-16 are similarly deemed to distinguish in view of recitation of a moveable valve member coupled to a membrane, such membrane applying a force to the valve member and thus cause movement thereof.

Response to Arguments

8. Applicant's arguments filed on November 26, 1998 have been fully considered but they are not persuasive. It is argued that Drori ('581) teaches self cleaning of the filter elements by spraying of water through a nozzle system during rotation of the filter elements. It is submitted that Drori actually uses a combination of backwash flow through the filter elements, rotation of the filter elements and cleaning of the filter elements by spraying with the nozzle system (see column 3, line 62 - column 4, line 11 and column 5, lines 29-44). Of particular relevance is column 4, lines 3-4 reciting a reverse flow of water through the filter body.

On the other hand, arguments directed to Granot ('655) are persuasive and rejections based on Granot are dropped.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph W. Drodge whose telephone number is (703) 308-0403. The examiner can normally be reached on Monday-Friday from approximately 8:30 AM - 4:45 PM.

The fax phone number for this Group is (703) 305-3599. When filing a FAX in Tech Center 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

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Joseph Drodge
Joseph W. Drodge
Primary Examiner
Art Unit 1723

JWD
December 17, 1999